

6. (Amended) A recombinant DNA obtained by inserting the DNA of claim 3 into a vector.

8. (Amended) A transformant comprising the recombinant DNA of claim 6.

12. (Amended) A method for producing the polypeptide comprising an amino acid sequence selected from the amino acid sequences represented by any one of SEQ ID NOS:10 to 16, or comprising an amino acid sequence in which at least one amino acid has been deleted, substituted or added in an amino acid sequence selected from the amino acid sequences represented by any one of SEQ ID NOS:14 to 16 and is capable of binding to JNK3, comprising culturing the transformant of claim 8 in a medium to produce and accumulate the polypeptide in the culture, and recovering the polypeptide from the culture.

13. (Amended) An oligonucleotide which is selected from an oligonucleotide comprising a sequence identical to continuous 5 to 60 bases in a nucleotide sequence in claim 3 and the DNA comprising the nucleotide

sequence represented by SEQ ID NO:5, an oligonucleotide comprising a sequence complementary to the oligonucleotide, and an oligonucleotide analogue of these oligonucleotides.

15. (Amended) A method for detecting mRNA encoding the polypeptide comprising an amino acid sequence selected from the amino acid sequences represented by any one of SEQ ID NOS:10 to 16, or comprising an amino acid sequence in which at least one amino acid has been deleted, substituted or added in an amino acid sequence selected from the amino acid sequences represented by any one of SEQ ID NOS:14 to 16 and is capable of binding to JNK3, comprising using the oligonucleotide of claim 13 or 14.

16. (Amended) A method for inhibiting expression of the polypeptide comprising an amino acid sequence selected from the amino acid sequences represented by any one of SEQ ID NOS:10 to 16, or comprising an amino acid sequence in which at least one amino acid has been deleted, substituted or added in an amino acid sequence selected from the amino acid sequences represented by any one of SEQ ID NOS:14 to 16

and is capable of binding to JNK3, comprising using the oligonucleotide of claim 13 or 14.

18. (Amended) A method for immunologically detecting the polypeptide comprising an amino acid sequence selected from the amino acid sequences represented by any one of SEQ ID NOS:10 to 16, or comprising an amino acid sequence in which at least one amino acid has been deleted, substituted or added in an amino acid sequence selected from the amino acid sequences represented by any one of SEQ ID NOS:14 to 16 and is capable of binding to JNK3, comprising using the antibody of claim 17.

19. (Amended) A method for immunohistologically staining of the polypeptide comprising an amino acid sequence selected from the amino acid sequences represented by any one of SEQ ID NOS:10 to 16, or comprising an amino acid sequence in which at least one amino acid has been deleted, substituted or added in an amino acid sequence selected from the amino acid sequences represented by any one of SEQ ID NOS:14 to 16 and is capable of binding to JNK3, comprising using the antibody of claim 17.

25. (Amended) The method of screening a compound capable of changing expression of a gene encoding a polypeptide, comprising bringing a cell which expresses the polypeptide into contact with a test sample, said polypeptide comprising an amino acid sequence selected from the amino acid sequences represented by any one of SEQ ID NOS:9 to 16 or a polypeptide comprising an amino acid sequence in which at least one amino acid has been deleted, substituted or added in an amino acid sequence selected from the amino acid sequences represented by SEQ ID NOS:9 to 16 and being capable of binding to JNK3, wherein the expression of a gene is detected by the method of claim 15.

26. (Amended) The method of screening a compound capable of changing expression of a gene encoding a polypeptide, comprising bringing a cell which expresses the polypeptide into contact with a test sample, said polypeptide comprising an amino acid sequence selected from the amino acid sequences represented by any one of SEQ ID NOS:9 to 16 or a polypeptide comprising an amino acid sequence in which at least one amino acid has been deleted, substituted or added in an amino acid sequence selected from the amino acid

sequences represented by SEQ ID NOS:9 to 16 and being capable of binding to JNK3, wherein the polypeptide is detected using the method of claim 18.

27. (Amended) A compound obtained by the method of claim 24 or a pharmacologically acceptable salt thereof.

30. (Amended) An agent for preventing neurodegenerative diseases, amyotrophic diseases, ischemic diseases, brain damage due to stroke, schizophrenia, depression, epilepsy, or immunological and inflammatory diseases, comprising the polypeptide of claim 1 or 2.

31. (Amended) An agent for treating neurodegenerative diseases, amyotrophic diseases, ischemic diseases, brain damage due to stroke, schizophrenia, depression, epilepsy, or immunological and inflammatory diseases, comprising the polypeptide of claim 1 or 2.

32. (Amended) An agent for preventing neurodegenerative diseases, amyotrophic diseases, ischemic diseases, brain damage due to stroke, schizophrenia,

depression, epilepsy, or immunological and inflammatory diseases, comprising the oligonucleotide of claim 13.

33. (Amended) An agent for treating neurodegenerative diseases, amyotrophic diseases, ischemic diseases, brain damage due to stroke, schizophrenia, depression, epilepsy, or immunological and inflammatory diseases, comprising the oligonucleotide of claim 13.

34. (Amended) An agent for preventing neurodegenerative diseases, amyotrophic diseases, ischemic diseases, brain damage due to stroke, schizophrenia, depression, epilepsy, or immunological and inflammatory diseases, comprising the antibody of claim 17.

35. (Amended) An agent for treating neurodegenerative diseases, amyotrophic diseases, ischemic diseases, brain damage due to stroke, schizophrenia, depression, epilepsy, or immunological and inflammatory diseases, comprising the antibody of claim 17.